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| 13. ABSTRACT (Maximum 200) The newly established Division of Etiology and Prevention of Hormonal Cancers, Kansas Cancer Institute (KCI), has further developed in the second year of U.S. Army Medical Research and Development support a Breast Tissue and Serum Repository Core Facility (BTSR) to facilitate and foster breast cancer-related research at KCI and other research institutions in the Southern Plains States. To date, the BTSR has collected multiple malignant, nonmalignant, and normal breast tissue specimens, as well as serum and lymphocyte specimens from all consenting surgical patients. The collection and cataloging of endometrial and ovarian malignant and nonmalignant tissues and blood has also been initiated. For each patient specimen, whether serum or tissue, a personal health history form has been completed when possible. In addition, physician records of each patient are available if the information contained therein is needed by investigators. Patient confidentiality is strictly maintained, and patients' identities are not available to users of the BTSR Core Facility. A committee, comprising both clinical and basic science faculty, reviews proposals for basic science and clinical studies. | | | |
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FOREWORD

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 In conducting research using animals, the investigator(s) adhered to the "Guide for the Care and Use of Laboratory Animals," prepared by the Committee on Care and use of Laboratory Animals of the Institute of Laboratory Resources, national Research Council (NIH Publication No. 86-23, Revised 1985).

✓ For the protection of human subjects, the investigator(s) adhered to policies of applicable Federal Law 45 CFR 46.

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 In the conduct of research utilizing recombinant DNA, the investigator(s) adhered to the NIH Guidelines for Research Involving Recombinant DNA Molecules.

 In the conduct of research involving hazardous organisms, the investigator(s) adhered to the CDC-NIH Guide for Biosafety in Microbiological and Biomedical Laboratories.


10/20/96
PI - Signature Date

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INTRODUCTION

The cause(s) of breast cancer and the means to predict who will develop it are currently not well understood. Understanding of either or both is an essential step to successful prevention of this prevalent disease in the future. Similarly, there is a paucity of knowledge related to early detection of breast cancer, because screening procedures, while improving, do not allow detection of breast cancer at the earliest and most curable stages. The development of the BTSR Core Facility at the KCI-KUMC is an important step to address these issues at this institution.

Development of the BTSR is highly relevant to expansion and augmentation of breast cancer research, including clinically-related and basic, at the Kansas Cancer Institute (KCI) and University of Kansas Medical Center (KUMC). The BTSR's purpose is to facilitate investigator-initiated research to perform correlation studies on the incidence of possible premalignant and malignant breast lesions with genetic and variable biomarkers (e.g., receptors, hormones, cellular proteins, protooncogenes, and tumor suppressor genes, etc.); and to assess the presence of potential carcinogens.

A focus of the newly created Division of Etiology and Prevention of Hormonal Cancers (DEPHC) is to assist, complement, and expand existing, ongoing programs and to develop new programs in molecular biology and molecular cytogenetics in breast cancer research at KCI. A central emphasis of this Division is that hormones, particularly estrogens and progestin, play a critical role in breast tumor causation, progression, and dependency. Hormonal involvement in breast cancer etiology at the cellular and molecular level is not well understood and requires elucidation.

BODY

I. Background

After a delayed start as detailed in our previous report, the KCI-BTSR has been operational for 17 months and is making excellent progress. Drs. Jonathan Li and Walter Imagawa continue as Director and Associate Director, respectively, and Ms. Leslie Hudson continues as Biologist II. Ms. Julianne Heaston replaced Ms. Rhonda Doolittle as secretary on March 18, 1996.

II. Experimental Methods

Tissue Samples

Tissue samples for the KCI-BTSR are acquired from patients who have breast biopsies, lumpectomies, mastectomies, or breast reduction surgery, and also from women who undergo hysterectomy and/or oophorectomy for malignant and nonmalignant conditions. Ms. Leslie Hudson, the BTSR biologist, acquires the daily surgical schedule for all breast surgeries and is present in the Surgical Pathology Laboratory during the processing of the breast specimens. These are handled in a timely fashion in order to preserve the tissues appropriately. The breast tissue, normal, abnormal, and neoplastic, is placed on a frozen cutting board provided by the BTSR. The breast tissue specimens are delivered to the Surgical Pathology Laboratory within 10 min. A certified pathologist immediately evaluates the tumor, and a frozen section is prepared for diagnosis. The pathologist then cuts tumor/normal tissue specimens for the repository biologist if sufficient sample is available.

If there is sufficient tissue sample, one portion is allocated for frozen sections. Tissue samples destined for frozen section are covered with tissue-embedding medium in a cryomold, then placed in an airtight polypropylene container, labeled with a proper bar-code label (specimen-specific identification number--please see below), and immediately snap-frozen in an N₂ container before storage in the BTSR freezer. The remaining tissue sample is similarly labeled and snap-frozen in a polypropylene container.

Each specimen is assigned a unique six-digit specimen-specific identification number. The first digit is unique and refers to the type of specimen: tumor tissue, healthy adjacent tissue, tissue from a breast reduction surgery, or serum. The remaining five-digit number is assigned sequentially, with biopsy tissue, healthy adjacent tissue, and serum for a particular patient assigned the same five digits. All breast tissue aliquots derived from the same tissue are assigned the same six-digit number. This six-digit specimen-specific identification number is shown on the bar-code with which the biologist labels each container and slide.

A Surgical Pathology requisition form is computer generated by the Surgery Department and accompanies the specimen when it is delivered to the Pathology Laboratory. Information included on this form consists of hospital patient identification number, surgeon's name, patient's name and age, date of surgery, and site of specimen. In addition, Surgical Pathology personnel write the Surgical Pathology identification number on the requisition form, and the surgical pathologist measures the tumor before it is divided, indicating the size of the tumor. The repository records the repository specimen-specific identification number on the requisition form. The BTSR biologist

makes a copy of this form in the Pathology Laboratory and takes it to the BTSR along with the specimens. These data will eventually be entered into the BTSR database.

The following tests are routinely carried out on all breast biopsy samples at KUMC (see protocol, p. 12):

- (1) estrogen and progesterone receptor analysis;
- (2) immunostaining for p53, HER-2/neu, and cathepsin;
- (3) ploidy analysis by flow cytometry or image analysis;
- (4) actual Surgical Pathology analysis, including a thorough analysis of tumor characteristics, histological type, histological grade, size, etc.

BTSR personnel can retrieve the results of all these tests as soon as they are available and enter the information into the BTSR database, as described below in Cataloging and Storage. Results from test (1) above are obtained from the Clinical Laboratory and test (4) results from the Flow Cytometry Laboratory, while those of the remaining tests are obtained from the Surgical Pathology Department.

Serum Samples

Blood samples both from women having breast surgery and from women at the KCI High Risk Breast Clinic will be submitted to the BTSR. The procedure described below is followed for each group of women.

Three days before a patient is scheduled to have breast surgery, she is required to go to the Outpatient Laboratory to have her blood drawn for various presurgical tests. It is the BTSR biologist's responsibility to secure the schedule of these visits in advance from the surgeons' scheduling nurse and to advise the Outpatient Laboratory to draw one extra vial of blood from each of these patients for the BTSR. The BTSR biologist is stationed in the Outpatient Laboratory at the time of each of these appointments to be sure that this extra blood is drawn and to label the blood vials with the proper outpatient laboratory labels, which include the patient's name and hospital patient identification number.

In addition, the BTSR biologist gives the patient consent forms for donating blood to the BTSR, asking the patient to sign these and to complete the Personal Health History questionnaire described in detail below under Storage and Cataloging. After the patient completes the questionnaire, the

BTSR biologist writes the six-digit specimen-specific identification number on the upper right-hand corner of the front page of the questionnaire.

Women who are considered at high risk for breast cancer are eligible to participate in the KCI High-Risk Breast Clinic. In general, eligible women include those between 30 and 55 years of age who have at least one of the following conditions: a first-degree relative who has had breast cancer, or, in herself, precancerous mastopathy or prior node-negative breast cancer in one breast.

The High-Risk Breast Clinic is located at the KU Cancer Center Comprehensive Outpatient Diagnostic and Treatment Center. During each patient's first visit to the clinic, blood is drawn for various medical tests. The BTSR biologist is responsible for securing the schedule of these visits in advance and advising the clinic to draw one extra vial of blood from each new patient for the Serum Repository. The identical procedure described above for securing the blood and completed questionnaire from breast surgery patients at the Outpatient Laboratory is also followed for new patients seen at the High-Risk Breast Clinic.

When blood specimens are received at the BTSR, the biologist processes the blood before the specimens are cataloged and stored in the freezer. After spinning down the reamed whole clotted blood in a refrigerated centrifuge, she removes the vial cap and, with a sterile pipette, divides the sera into 1.5-ml aliquots in the polypropylene containers. Each container is then labeled with the proper bar-code label and snap-frozen. Three times a day, the labels are scanned and the appropriate data entered into the Biopsy Serum Table, the Reduction Mammoplasty Serum Table or the High Risk Serum Table, depending on the source of the serum.

The specimen-specific number on the bar-code label will have been assigned to all specimens obtained. The six-digit identification number is identical to the number assigned to the tissue specimen for the same patient, when applicable.

Similar procedures have been developed for the collection of tissues and blood from gynecological patients. The questionnaire used for breast patients has been modified for these patients.

Lymphocyte Samples

The BTSR has the capacity to separate and freeze lymphocytes from peripheral blood when a special request is received. Blood will be collected in heparin- or EDTA-containing tubes. A 10-ml tube is necessary. Preferably, two hours after blood collection, the procedure detailed on p. 10 should be followed.

After all serum and lymphocytes are separated and labeled, the BTSR biologist then stores the tissue and serum samples in the freezer and records all data regarding storage location in the Location Table of the database. These data include specimen identification number and sample location, including freezer shelf, box and cubicle number. This will allow the BTSR staff to locate all specimens quickly and easily.

Storage and Cataloging

When a tissue sample is received at the KCI-BTSR, specimen bar codes are scanned into the Biopsy Table, the Healthy Adjacent Table, or the Reduction Mammoplasty Table of the Repository Database, as appropriate; the unique hospital patient identification number, the date that the specimen is received by the BTSR, the hospital of origin, the total amount of tissue, the surgical date, and all other data shown on the surgical requisition form that accompanies each specimen are then keyed in.

All specimen-specific and patient-specific data are maintained in the computerized Repository Database Management system, developed by the Program Database Leader using FoxPro for Windows, a database management software package. FoxPro is a relational database system that allows for various files in the system to be linked by means of key fields. In the Repository Database, the key fields are the unique specimen number and a combination of the hospital patient identification number and the hospital number. This combination serves as a unique patient identifier. Any or all of the tables within the database are linked using these three fields.

When a patient questionnaire is delivered to the Repository, it is initially labeled with the appropriate bar code. The first digit of the six-digit identification number reflects that this is a questionnaire, while the remaining five digits match those of the other specimens for the same patient. The questionnaire labels are then scanned and the data entered into the Demographic/Life Style Table. Responses to this questionnaire will be extremely valuable to many research investigators who will be using the BTSR breast specimens. The data requested include demographic, physical, and lifestyle information. Specifically, questions concern age, racial/ethnic background, marital status, religion, weight, height, education, occupation, family income, family history of breast cancer, age at first period, and menopausal, childbirth, lactation and alcohol history. To maintain confidentiality, all questionnaires are filed and locked up in a secure location after the data are entered into the database.

RESULTS

During the past year, the repository has substantially increased its inventory of breast tissues and blood products. The total number of breast, endometrial, and ovarian tissue specimens with

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accompanying serum samples and histology blocks is summarized on page 13. The repository now has in storage 39 specimens of malignant breast tissue, 56 specimens of nonmalignant breast tissue (e.g., fibroadenoma, fibrocystic, etc.), and 9 normal specimens from breast reductions. The repository has also begun collecting endometrial and ovarian tissues and blood products from patients undergoing gynecological surgery. For endometrial and ovarian tissue, 6 malignant and at least 30 nonmalignant specimens of each type are currently in storage.

The collection of serum and lymphocyte specimens has also accelerated over the past year as summarized on page 14. The total serum and lymphocyte samples for breast tissues has increased, and now, 77 and 19 specimens, respectively, are stored and available. For surgical patients from whom tissue is not available, blood is still collected for the repository. However, serum is not always available from patients due to patient refusal. Total serum and lymphocyte samples for endometrial and ovarian tissue now number more than thirty.

On pages 15-24 is listed the current inventory of the KCI-BTSR, indicating the bar coding of samples and sample location in the repository freezer.

Currently, only investigators at KUMC have access to specimens from the repository:

| Investigator | % Estimated Use | Research Support |
|---|-----------------|--|
| Jonathan J. Li, Ph.D. Sara Antonia Li, Ph.D. | 5% | NCI 5 R01 CA 58030-04 NCI 1 R01 CA 64047-03 |
| Walter T. Imagawa, Ph.D. | 10% | ACS RD-55, NCI CA 68414-01 |
| Gregory Reed, Ph.D. | 10% | Dept. of Pharmacology institutional funds |
| Carol Fabian, M.D. | 15% | NCI PO1 CA 72094 NCI UO1 CA 72296 NCI MAA NCI CN 45593-32 NCI N01 CN 65024-32 |

CONCLUSIONS

The repository has successfully established itself with a growing inventory and database. In addition, the collection of tissue specimens from gynecological cancers has expanded the utility of the repository to a broader range of investigators.

Future Goals

1. Increase collection of breast tissue by outreach to other local hospitals.
2. Call for breast, serum, and lymphocyte proposals from investigators at KUMC (Kansas City), Kansas State University (Basic Cancer Center), and KUMC (Wichita) (Women's Health Institute). A multidisciplinary review committee for this purpose has been assembled (p. 9) now that the KCI-BTSR is completely functional.
3. Expand collection of human tumor specimens to prostate, colon, thyroid, pancreas, liver, and testicular cancers and corresponding normal tissues, as well as corresponding serum and lymphocyte samples. Since a number of KUMC investigators have research interests in cancers at these organ sites, it seems useful to expand cancer research studies at KUMC by making these tumors available to all interested investigators.

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APPENDIX

KCI-BTSR Committee on Human Tissue Specimen Usage

William Jewell, M.D. - Surgeon (breast), Professor and Director, Kansas Cancer Institute
Jonathan J. Li, Ph.D. - Director, BTSR Core Facility, Professor
Sara Antonia Li, Ph.D. - Hormonal Carcinogenesis Researcher, Associate Professor
Janet Woodroof, M.D. - Pathologist, Assistant Professor
Walter Imagawa, Ph.D. - Breast Cancer Researcher and Associate Director, BTSR Core Facility,
Assistant Professor
Carol Fabian, M.D. - Medical Oncologist (breast), Professor
Cooley Pantazis, M.D. - Chief, Surgical Pathology, Associate Professor

Lymphocyte Separation

Collect blood in a 10ml heparin or EDTA containing vacutainer tubes.
Preferably, two hours after blood collection, follow this procedure:

1. Pipet 4-5mL Histopaque-1077 into each of four 15mL centrifuge tubes;
2. Draw 3mL Hank's Solution into pipet, then 2-3mL whole blood and place in 15mL centrifuge tube. Add an additional 4mL Hank's Solution to tube, cap and mix by gently inverting tube. Prepare 4 tubes this way;
3. Tilt tube in #1 and add blood mixture so as to create a sharp interface;
4. Centrifuge at 400 x g (approx. 1400 rpm) for 30 minutes at room temperature;
5. After the centrifugation, draw off the opaque interface, being careful not to collect any of the medium below, and transfer to 15mL centrifuge tube containing approximately 5mL Hank's Solution. Mix by gently inverting capped tube, then fill tube with Hank's Solution;
6. Centrifuge at 250 x g (approx. 1000 rpm) for 10 minutes at room temperature;
7. Discard supernatant;
8. Resuspend pellet in 5 mL of Hank's Solution (mix using pipet - aspirations and vortexing);
9. Centrifuge at 250 x g (approx. 1000 rpm) for 10 minutes at room temperature;
10. Discard supernatant;
11. Resuspend pellet in 0.5 mL of Hank's Solution
12. Determine cell count using Crystal Violet (Stain 0.05mL cell solution with 0.45mL Crystal Violet and vortex for 20 sec.); Count number of stained cells in hemocytometer (determine total cells);
13. Put cells in bar code-labelled vial;
14. Freeze at -80°C.

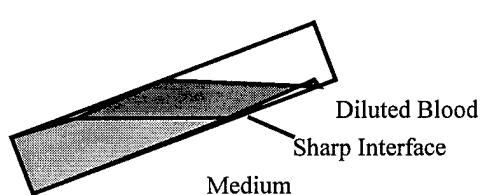
Notes: Steps 5-11 are washing steps only.

For questions contact Dean Merkel in Hematology (pager #7014).

Blood dilution in step #1 useful in preventing loss of white cells in high concentration of red cells.

Materials needed:

15 ml capped centrifuge tubes
Histopaque-1077
Hank's Solution
Crystal Violet
5mL pipets
1mL pipets
200uL micropipet



Plasma/Medium
White Cells = Opaque Interface
Plasma/Medium
Red Cells

Serum Separation

Collect blood in 10ml Serum Separator Tubes.

Allow to sit at room temperature for 1 - 2 hours and follow this procedure:

1. Centrifuge at 1500 rpm for 15 minutes at 4°C;
2. Aliquot 1.5 mL serum into each bar code-labelled, chilled vial, noting in database amount in last vial if not 1.5 ml.
3. Freeze at -80°C.

INVASIVE MAMMARY CARCINOMA PROTOCOL

Tumor size <1cm in greatest diameter:

- 1) Scrape for ploidy by image analysis, take to image room (Marilyn or Julie)^a
- 2) Scrape for flow cytometry (call Bill Justice -3876) ^b
- 3) Order ER/PR, MIB-1, p53, HER-2/neu, cathepsin immunostains (give req to Julie) ^c

Tumor size 1 to 1.5cm in greatest diameter:

- 1) Scrape for ploidy by image analysis, take to image room (Marilyn or Julie)^a
- 2) Scrape for flow cytometry (call Bill Justice -3876) ^b
- 3) Send 0.5cm piece of tumor for ER/PR EIA (call metabolic lab) ^d
- 4) Order MIB-1, p53, HER-2/neu, cathepsin immunostains (give req to Julie) ^c

Tumor size 1.5 to 2.0cm in greatest diameter:

- 1) Scrape for ploidy by image analysis, take to image room (Marilyn or Julie)^a
- 2) Send 0.5cm piece of tumor for ER/PR EIA (call metabolic lab) ^d
- 3) Place a 0.5cm piece of tumor into RPMI for flow cytometry (call Bill Justice -3876) ^e
- 4) Order MIB-1, p53, HER-2/neu, cathepsin immunostains (give req to Julie) ^c

Tumor size >2.0cm in greatest diameter:

- 1) Scrape for ploidy by image analysis, take to image room (Marilyn or Julie)^a
- 2) Send 0.5cm piece of tumor for ER/PR EIA (call metabolic lab) ^d
- 3) Place a 0.5cm piece of tumor into RPMI for flow cytometry (call Bill Justice -3876) ^e
- 4) Order MIB-1, p53, HER-2/neu, cathepsin immunostains (give req to Julie) ^c
- 5) Submit 0.5cm of tumor to Oncotech (in Oncotech media).
- 5) Submit at least 0.5cm of tumor to the breast tumor bank (Leslie Hudson).

^a Scrape for ploidy by image analysis. Scrape tumor with surgical blade and place material in the middle of a superfrost slide; using another superfrost slide, gently smear the material across the slide, and let air dry. Take the slide and a copy of the requisition to the image analysis room. Page Marilyn Davis if you have questions (6098).

^b Scrape tumor for flow cytometry. Use a small amount of pressure when scraping. After each of 6 scrapes (3/tumor slice) immerse the scalpel blade in RPMI medium and shake the blade to dislodge the cells. Place the sample in the refrigerator with a copy of the requisition, and call Bill Justice (ext 3876).

^c Order ER/PR, MIB-1, p53, HER-2/neu, and cathepsin immunostains on a paraffin block (block in which the tissue opposite the frozen section is submitted). Do not order on frozen section block unless it is the only block with tumor.

^d Place a 0.5cm piece of tumor into a labeled plastic bag and freeze immediately in liquid nitrogen. Fill out green requisition requesting "ER/PR". Call metabolic lab (7020) to send out to Roche.

^e Place a 0.5cm piece of tumor into RPMI for flow cytometry. Call Bill Justice (ext 3876).

Breast Tissue and Serum Repository
 Specimen Update 10/18/96

Tissues

| | BREAST TISSUE | | |
|-------------------------|----------------------|---------------|--------|
| | Malignant | Non-Malignant | Normal |
| Total Samples | 39 | 57 | 9 |
| Blood Samples* | 24 | 19 | 1 |
| Histology Blocks | 13 | 17 | 2 |
| Complete Sets | 10 | 9 | 1 |

*Blood not obtained due to patient decline to consent.

| | ENDOMETRIAL TISSUE | |
|-------------------------|---------------------------|---------------|
| | Malignant | Non-Malignant |
| Total Samples | 6 | 32 |
| Blood Samples | 5 | 30 |
| Histology Blocks | 2 | 12 |
| Complete Sets | 2 | 12 |

| | OVARIAN TISSUE | |
|-------------------------|-----------------------|---------------|
| | Malignant | Non-Malignant |
| Total Samples | 6 | 39 |
| Blood Samples | 6 | 34 |
| Histology Blocks | 3 | 19 |
| Complete Sets | 3 | 18 |

Blood Products

| | Total Samples | Breast Malignant | Non-Malignant |
|--------------------|---------------|---------------------|---------------|
| Serum Samples | 77 | 48 | 28 |
| Lymphocyte Samples | 65 | 38 | 25 |

| | Total Samples | Endometrium Malignant | Non-Malignant |
|--------------------|---------------|--------------------------|---------------|
| Serum Samples | 34 | 5 | 31 |
| Lymphocyte Samples | 32 | 5 | 29 |

| | Total Samples | Ovary Malignant | Non-Malignant |
|--------------------|---------------|--------------------|---------------|
| Serum Samples | 37 | 6 | 34 |
| Lymphocyte Samples | 36 | 6 | 33 |

SAMPLE LOG

Malignant and Non-Malignant Tissue

Breast

| Bar Code | Date of Procedure | Age of Patient | # Vials | Sample Location |
|----------|-------------------|----------------|---------|--|
| 100000 | 5/12/95 | 72 | 2 | 1A1.1-2 malignant tissue |
| 100001 | 5/17/95 | 76 | 1 | 1A1.3 malignant tissue |
| 100009 | 6/5/95 | 46 | 1 | *1A1.4 malignant tissue |
| 100011 | 6/5/95 | 28 | 7 | 1A1.5-6, 1B1.1-5 malignant tissue |
| 100018 | 8/16/95 | 43 | 13 | 1A1.7-19 (mastectomy w/non-malignant tissue) |
| 100020 | 8/16/95 | 52 | 1 | 1A1.20 malignant tissue |
| 100022 | 9/8/95 | 47 | 5 | 1A1.21-25 (mastectomy - only 1A1.25 contains malignant tissue) |
| 000003 | 9/8/95 | 71 | 9 | 1A1.26-34 (mastectomy w/non-malignant tissue) |
| 000004 | 9/1/95 | 60 | 3 | 1A1.35-37 malignant tissue |
| 000005 | 9/20/95 | 46 | 5 | 1A1.38-42 non-malignant tissue |
| 000007 | 9/1/95 | 37 | 1 | *1B4.2 non-malignant |
| 000011 | 9/25/95 | 60 | 2 | 1A1.43-44 malignant tissue |
| 000013 | 10/18/95 | 77 | 1 | 1A1.51 non-malignant tissue |
| 000014 | 11/3/95 | 83 | 2 | 1A1.45-46 non-malignant tissue (male) |
| 000016 | 11/8/95 | 42 | 1 | 1A1.47 non-malignant tissue |
| 000017 | 10/24/95 | 43 | 1 | 1A1.48 malignant tissue |
| 000018 | 11/21/95 | 42 | 4 | 1A1.69-72 non-malignant tissue |
| 000019 | 10/26/95 | 52 | 1 | 1A1.49 malignant |
| | 11/27/95 | | 14 | 1A1.55-65,1B2.1-3 non-malignant |
| 000023 | 11/21/95 | 31 | 1 | 1A1.50 malignant |
| 000024 | 12/1/95 | 26 | 1 | 1A1.52 non-malignant |
| 000027 | 12/8/95 | 33 | 1 | 1A1.53 non-malignant |
| 000029 | 12/18/95 | 59 | 1 | 1A1.54 malignant |
| 000030 | 12/20/95 | 22 | 1 | 1A1.73 non-malignant |
| 000031 | 12/20/95 | 58 | 1 | 1A1.66 malignant |
| 000032 | 12/29/95 | 55 | 1 | 1A1.67 malignant |
| 000033 | 2/19/96 | 36 | 1 | 1A1.68 malignant |
| 000036 | 12/22/95 | 83 | 1 | *1A2.37 malignant |
| 000039 | 1/26/96 | 44 | 4 | *1A2.38-41 malignant |
| 000040 | 1/29/96 | 47 | 9 | 1A2.4-8 (L) non-malignant, 1B2.4-7 (R) non-malignant (presence of i.s.possible) |
| 000041 | 11/29/95 | 42 | 1 | 1A1.74 non-malignant |
| 000057 | 3/27/96 | 53 | 1 | 1A2.9 non-malignant |
| 000060 | 11/8/95 | 49 | 2 | 1A1.76-77 malignant |
| | 2/26/96 | | 7 | 1A1.78-81,1A2.1-3 non-malignant |
| 000063 | 3/13/96 | 58 | 1 | 1A1.75 non-malignant |
| 000064 | 4/1/96 | 56 | 4 | 1A2.13-16 non-malignant (presence of malignant possible) |
| 000066 | 3/25/96 | 25 | 1 | 1A2.10 non-malignant |
| 000070 | 3/13/96 | 76 | 2 | 1A2.11-12 malignant |
| 000074 | 3/25/96 | 42 | 1 | 1A2.25 non-malignant |
| 000078 | 4/15/96 | 44 | 2 | 1A2.17-18malignant & non-malignant |
| 000080 | 3/27/96 | 34 | 1 | 1A2.32 malignant |
| 000081 | 4/22/96 | 83 | 1 | 1A2.19 non-malignant |
| 000083 | 5/1/96 | 49 | 3 | 1A2.20,21-22 malignant |
| 000091 | 1/19/96 | 64 | 1 | 1A2.26 malignant |
| 000095 | 5/22/96 | 51 | 1 | 1A2.23microcalcifications |
| 000096 | 5/20/96 | 33 | 1 | 1A2.27 non-malignant |
| 000104 | 6/10/96 | 45 | 4 | 1B3.6-9 non-malignant |
| 000111 | 4/3/96 | 55 | 1 | 1A2.24 malignant |

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|--------|----------|----|---|---|
| 000117 | 7/1/96 | 69 | 2 | 1A2.61-62 malignant and non-malignant |
| 000126 | 8/9/96 | 41 | 1 | 1A2.28 malignant |
| 000128 | 2/7/96 | 69 | 1 | 1A2.42 malignant |
| 000129 | 8/26/96 | 25 | 1 | 1A2.31 non-malignant |
| 000139 | 9/9/96 | 47 | 1 | 1A2.33 malignant |
| 000141 | 9/16/96 | 41 | 1 | *1A2.63 malignant |
| 000142 | 9/23/96 | 43 | 1 | 1A2.64 malignant |
| 000143 | 9/16/96 | 32 | 1 | 1A2.65 non-malignant |
| 000144 | 9/16/96 | 27 | 1 | 1A2.66 non-malignant |
| 000146 | 9/18/96 | 65 | 1 | 1A2.67 non-malignant |
| 000148 | 9/18/96 | 76 | 1 | 1A2.68 non-malignant |
| 000149 | 9/10/96 | 56 | 1 | 1A2.69 malignant |
| 000151 | 9/30/96 | 40 | 1 | 1A2.70 non-malignant |
| 000152 | 10/2/96 | 36 | 1 | 1A2.71 malignant |
| 000154 | 4/10/96 | 70 | 4 | *1A2.72 non-malignant |
| 000155 | 8/5/96 | 55 | 1 | *1A2.29 malignant |
| 000157 | 8/28/96 | 44 | 1 | *1A2.30 non-malignant |
| 000160 | 4/17/96 | 32 | 3 | *1A2.34-35 non-malignant and 1A2.36 malignant |
| 000164 | 5/13/96 | 53 | 2 | *1B4.5-6 non-malignant (Breast Reduction for Fibrocystic Disease) |
| 000166 | 12/6/95 | 23 | 1 | *1A2.43 non-malignant |
| 000167 | 10/2/95 | 40 | 1 | *1A2.44 non-malignant |
| 000168 | 2/26/96 | 32 | 2 | *1B4.3-4 non-malignant |
| 000170 | 11/4/96 | 25 | 1 | *1A2.45 non-malignant |
| 000171 | 10/6/95 | 54 | 1 | *1A2.46 malignant |
| 000172 | 2/28/96 | 36 | 1 | *1A2.47 non-malignant |
| 000173 | 3/6/96 | 55 | 5 | *1A2.48-52 non-malignant |
| 000174 | 12/13/95 | 50 | 1 | *1A2.53 malignant |
| 000175 | 3/25/96 | 73 | 1 | *1A2.54 non-malignant |
| 000176 | 3/18/96 | 40 | 2 | *1A2.55-56 non-malignant |
| 000177 | 10/16/95 | 81 | 1 | *1A2.57 malignant |
| 000179 | 3/25/96 | 61 | 1 | *1A2.58 non-malignant |
| 000181 | 9/8/95 | 31 | 1 | *1A2.59 non-malignant |
| 000182 | 4/22/96 | 34 | 1 | *1A2.60 malignant |
| 000185 | 5/22/96 | 17 | 1 | *1A2.73 non-malignant |
| 000186 | 6/19/96 | 39 | 1 | *1A2.74 non-malignant |
| 000187 | 5/6/96 | 74 | 1 | *1A2.75 malignant |
| 000188 | 5/6/96 | 35 | 1 | *1A2.76 non-malignant |
| 000189 | 9/11/96 | 37 | 1 | *1A2.77 non-malignant |
| 000190 | 6/10/96 | 26 | 1 | *1A2.78 non-malignant |
| 000191 | 6/19/96 | 35 | 1 | *1A2.79 non-malignant |
| 000192 | 4/24/96 | 58 | 1 | *1A2.80 non-malignant |
| 000193 | 7/8/96 | 47 | 1 | *1A2.81 non-malignant |
| 000194 | 10/18/95 | 77 | 1 | *1A3.1 non-malignant |
| 000195 | 4/24/96 | 46 | 4 | *1A3.2-5 non-malignant |
| 000196 | 7/8/96 | 63 | 1 | *1A3.6 malignant |
| 000197 | 4/24/96 | 49 | 1 | *1A3.7 non-malignant |
| 000198 | 10/14/96 | 36 | 1 | 1A3.8 non-malignant |

Gynecologic

| Bar Code | Date of Procedure | Age of Patient | # Vials | Sample Location |
|----------|-------------------|----------------|---------|---|
| 000037 | 1/22/96 | 65 | 2 | 2A1.1, 2B1.1 malignant endometrium |
| 000038 | 1/24/96 | 42 | 2 | 2A1.2, 2B1.2 malignant ovary, cervical metastasis in omentum |
| 000042 | 1/30/96 | 42 | 5 | 2A1.3-6, 2B1.3 non-malignant endometrium |
| 000043 | 1/30/96 | 34 | 1 | 2A1.7 non-malignant endometrium |
| 000044 | 1/31/96 | 46 | 1 | 2A1.8 non-malignant endometrium |
| 000045 | 2/6/96 | 28 | 3 | 2A1.9, 2B1.4-5 malignant cervix, non-malignant right and left ovary |
| 000046 | 2/7/96 | 54 | 4 | 2A1.10-13 non-malignant endometrium |
| 000047 | 2/8/96 | 11 | 3 | 2B1.6-8 malignant ovary |
| 000048 | 2/8/96 | 53 | 3 | 2A1.14-15, 2B1.9 malignant ovary, metastasis in peritoneum, non-malignant endometrium |
| 000050 | 2/16/96 | 55 | 3 | 2B2.1,2A1.16-17 in situ carcinoma endometrium, non-malignant ovary |
| 000051 | 2/16/96 | 37 | 2 | 2B2.2-3 non-malignant ovary, non-malignant endometrium |
| 000052 | 2/21/96 | 49 | 3 | 2A1.18-20 non-malignant endometrium, non-malignant ovary |
| 000053 | 2/27/96 | 72 | 2 | *2A1.21, 2B2.4 non-malignant endometrium |
| 000054 | 2/27/96 | 62 | 2 | *2A1.22-23 non-malignant ovary |
| 000061 | 3/12/96 | 37 | 1 | *2A1.24 non-malignant endometrium |
| 000065 | 3/20/96 | 33 | 1 | 2A1.25 non-malignant fallopian tube |
| 000067 | 3/25/96 | 35 | 3 | 2A1.26-28 non-malignant endometrium, right and left ovary |
| 000069 | 3/26/96 | 53 | 2 | *2A1.37-38 malignant peritoneal tumor nodules (metastatic ovarian cancer) |
| 000071 | 4/2/96 | 80 | 3 | 2B2.5-7 endometrium |
| 000072 | 4/2/96 | 43 | 4 | 2A1.39-41, 2B2.8-9 non-malignant endometrium, malignant and non-malignant ovary |
| 000075 | 4/16/96 | 58 | 3 | 2A1.42-44 malignant endometrium, non-malignant ovary |
| 000079 | 4/22/96 | 68 | 4 | 2A1.29, 2A1.45-47 non-malignant endometrium and ovary, malignant endometrium |
| 000087 | 5/6/96 | 41 | 4 | 2A1.30-33 non-malignant endometrium, ovary |
| 000088 | 5/7/96 | 37 | 2 | 2A1.48-49 ovary |
| 000089 | 5/8/96 | 70 | 2 | *2B3.1-2 malignant ovary |
| 000090 | 5/14/96 | 36 | 1 | 2A1.50 non-malignant endometrium |
| 000097 | 6/5/96 | 32 | 1 | 2A1.34 non-malignant cervix |
| 000098 | 6/5/96 | 30 | 2 | 2A1.35-36 non-malignant other |
| 000100 | 6/18/96 | 45 | 6 | 2A2.4-9 malignant endometrium, non-malignant endometrium, ovary, lymph node |
| 000101 | 6/19/96 | 65 | 1 | 2A2.10 non-malignant ovary |
| 000103 | 7/2/96 | 40 | 6 | 2A1.78-81, 2A2.1-2 malignant cervix, non-malignant endometrium, ovary, lymph node |
| 000106 | 6/24/96 | 70 | 4 | 2A1.58-61 malignant and non-malignant endometrium |
| 000107 | 6/26/96 | 54 | 2 | 2A1.62-63 non-malignant ovary |
| 000108 | 7/5/96 | 69 | 3 | *2A2.11-13 non-malignant ovary and fallopian tube |
| 000109 | 7/5/96 | 57 | 2 | 2A2.14-15 non-malignant ovary |
| 000110 | 7/9/96 | 56 | 4 | 2A2.16-19 non-malignant endometrium, ovary, lymph node |

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|--------|----------|----|---|--|
| 000112 | 7/11/96 | 49 | 2 | *2A2.20-21 non-malignant ovary, lymph node |
| 000113 | 7/12/96 | 41 | 2 | 2A1.68-69 non-malignant ovary |
| 000114 | 7/15/96 | 30 | 2 | 2A1.70-71 non-malignant endometrium, lymph node |
| 000118 | 7/24/96 | 52 | 2 | *2A1.64-65 non-malignant ovary |
| 000119 | 7/30/96 | 63 | 5 | 2A1.51-55 malignant endometrium, non-malignant ovary, lymph node |
| 000120 | 8/2/96 | 54 | 3 | 2A1.72-73, 2B3.3 non-malignant ovary |
| 000121 | 8/8/96 | 74 | 4 | 2A1.74-77 non-malignant endometrium, ovary, cervix |
| 000122 | 8/13/96 | 50 | 2 | 2A1.66-67 non-malignant endometrium, ovary |
| 000123 | 8/13/96 | 43 | 1 | 2A2.22 non-malignant endometrium |
| 000124 | 8/13/96 | 35 | 2 | *2A1.56-57 non-malignant lymph node |
| 000125 | 8/14/96 | 36 | 3 | 2B3.4-6 non-malignant ovary, endometrium, cul-de-sac |
| 000130 | 9/4/96 | 40 | 3 | 2A2.23-25 non-malignant endometrium, ovary |
| 000131 | 9/4/96 | 53 | 3 | 2A2.26-28 non-malignant endometrium, ovary |
| 000140 | 9/13/96 | 45 | 4 | *2A2.29-32 non-malignant endometrium, ovary, fallopian tube |
| 000145 | 9/18/96 | 77 | 3 | 2A2.33-35 malignant and non-malignant ovary, lymph node |
| 000150 | 9/26/96 | 45 | 2 | 2A2.36-37 non-malignant ovary |
| 000159 | 2/28/96 | 57 | 1 | *2A2.3 non-malignant ovary |
| 000165 | 10/9/96 | 82 | 2 | *2A2.38-39 non-malignant ovary |
| 000199 | 10/15/96 | 51 | 3 | 2A2.40-42 non-malignant ovary, endometrium |
| 000200 | 10/16/96 | 46 | 3 | *2A2.43-45 non-malignant ovary, endometrium |

Normal Breast Tissue

| Bar Code | Date of Procedure | Age of Patient | # Vials | Sample Location |
|----------|-------------------|----------------|---------|-----------------|
| 100010 | 6/5/95 | 26 | 4 | 1B1.6-9* |
| 000086 | 4/29/96 | 29 | 4 | 1B2.9, 1B3.1-3 |
| 000163 | 4/19/96 | 28 | 2 | 1B4.7-8* |
| 000183 | 3/12/96 | 20 | 2 | 1B4.9, 1B5.1* |
| 000092 | 5/13/96 | 27 | 2 | 1B3.4-5 |
| 000156 | 7/23/96 | 31 | 1 | 1B4.1* |
| 000184 | 3/18/96 | 17 | 2 | 1B5.2-3* |
| 000161 | 5/24/96 | 50 | 2 | 1B5.4-5* |
| 000162 | 6/3/96 | 42 | 2 | 1B5.6-7* |

Blood Serum

| Bar Code | Date of Procedure | Age of Patient | # Vials | Sample Location | Sample Class |
|----------|-------------------|----------------|---------|-----------------|-----------------------------|
| 100000 | 5/12/95 | 72 | 4 | 1C1.12-15 | Breast Cancer |
| 100001 | 5/17/95 | 76 | 3 | 1C1.25-27 | Breast Cancer |
| 100002 | 5/19/95 | 51 | 2 | 1C1.1-2 | Fibrocystic |
| 100003 | 5/22/95 | 59 | 3 | 1C1.3-5 | Fibrocystic |
| 100004 | 5/22/95 | 68 | 3 | 1C1.6-8 | Breast Cancer |
| 100005 | 5/22/95 | 54 | 3 | 1C1.9-11 | Breast Cancer |
| 100006 | 5/24/95 | 57 | 3 | 1C1.16-18 | Breast Cancer |
| 100009 | 6/5/95 | 46 | 3 | 1C1.22-24 | *Breast Cancer |
| 100011 | 6/5/95 | 28 | 3 | 1C1.19-21 | Breast Cancer |
| 100012 | 7/10/95 | 78 | 3 | 1C1.28-30 | Breast Cancer |
| 100013 | 7/19/95 | 56 | 3 | 1C1.35-37 | Breast Cancer |
| 100014 | 7/12/95 | 60 | 3 | 1C1.32-34 | Breast Cancer (7 primaries) |
| 100015 | 7/19/95 | 43 | 2 | 1C1.38-39 | Breast Cancer |
| 100016 | 8/11/95 | 39 | 3 | 1C1.41-43 | Fibrocystic |
| 100017 | 8/30/95 | 68 | 3 | 1C1.52-54 | Breast Cancer |
| 100019 | 8/16/95 | 42 | 3 | 1C1.48-50 | Breast Cancer |
| 100020 | 8/16/95 | 52 | 1 | 1C1.51 | Breast Cancer |
| 100022 | 9/8/95 | 47 | 4 | 1C1.55-58 | Breast Cancer |
| 000001 | 9/6/95 | 45 | 3 | 1C1.65-67 | Fibrocystic |
| 000002 | 9/8/95 | 51 | 2 | 1C1.70-71 | Fibrocystic |
| 000003 | 9/8/95 | 71 | 1 | 1C1.72 | Breast Cancer |
| 000004 | 9/1/95 | 60 | 4 | 1C2.43-46 | Breast Cancer |
| 000005 | 9/13/95 | 46 | 3 | 1C1.75-77 | Breast Cancer |
| 000006 | 9/13/95 | 70 | 2 | 1C1.78-79 | Breast Cancer |
| 000010 | 9/22/95 | 52 | 2 | 1C1.80-81 | Fibrocystic |
| 000011 | 9/25/95 | 60 | 3 | 1C2.3-5 | Breast Cancer |
| 000012 | 10/2/95 | 64 | 3 | 1C2.7-9 | Fibrocystic |
| 000013 | 10/18/95 | 77 | 3 | 1C2.11-13 | Fibrocystic |
| 000015 | 11/8/95 | 44 | 3 | 1C2.16-18 | Breast Cancer |
| 000016 | 11/8/95 | 42 | 3 | 1C2.19-21 | Fibrocystic |
| 000017 | 10/24/95 | 43 | 3 | 1C2.22-24 | Breast Cancer |
| 000018 | 11/21/95 | 42 | 2 | 1C2.25-26 | Breast Cancer |
| 000019 | 11/27/95 | 52 | 3 | 1C2.31-33 | Breast Cancer |
| 000020 | 11/17/95 | 44 | 1 | 1C2.34 | Fibrocystic |
| 000021 | 11/17/95 | 53 | 3 | 1C2.35-37 | Fibrocystic |
| 000022 | 8/9/95 | 65 | 3 | 1C1.61-63 | Fibrocystic |
| 000023 | 11/21/95 | 31 | 3 | 1C2.39-41 | Breast Cancer |
| 000025 | 12/6/95 | 49 | 3 | 1C2.49-51 | *Breast Cancer |
| 000026 | 12/6/95 | 59 | 3 | 1C2.53-55 | *Breast Cancer |
| 000027 | 12/8/95 | 33 | 3 | 1C2.57-59 | Fibrocystic |
| 000028 | 11/22/95 | 76 | 2 | 1C2.75-76 | Breast Cancer |
| 000029 | 12/18/95 | 59 | 3 | 1C2.66-68 | Breast Cancer |
| 000030 | 12/20/95 | 22 | 3 | 1C2.61-63 | Fibrocystic |
| 000031 | 12/20/95 | 58 | 3 | 1C2.69-71 | Breast Cancer |
| 000032 | 12/29/95 | 55 | 3 | 1C3.11-13 | Breast Cancer |
| 000033 | 9/22/95 | 36 | 3 | 1C2.77-79 | Breast Cancer |
| 000034 | 1/10/96 | 72 | 3 | 1C3.3-5 | Breast Cancer |
| 000035 | 12/27/95 | 46 | 3 | 1C3.7-9 | Breast Cancer |
| 000037 | 1/22/96 | 65 | 2 | 2C1.2-3 | Endometrial Cancer |

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|--------|----------|----|---|-----------------|---|
| 000038 | 1/24/96 | 42 | 3 | 2C1.5-7 | Ovarian Cancer |
| 000039 | 1/26/96 | 44 | 3 | 1C3.22-24 | *Breast Cancer |
| 000040 | 1/29/96 | 47 | 3 | 1C3.26-28 | Breast Cancer |
| 000041 | 11/29/95 | 42 | 3 | 1C3.65-67 | Fibrocystic |
| 000042 | 1/30/96 | 42 | 3 | 2C1.9-11 | Endometritis, adenomyosis |
| 000043 | 1/30/96 | 34 | 3 | 2C1.13-15 | Cervical Cancer |
| 000044 | 1/31/96 | 46 | 3 | 2C1.17-19 | Post-menopausal bleeding |
| 000045 | 2/6/96 | 28 | 2 | 2C1.21-22 | Squamous cell cancer of cervix |
| 000046 | 2/7/96 | 54 | 6 | 2C1.24-26,62-64 | non-malignant endometrium |
| 000047 | 2/8/96 | 11 | 3 | 2C1.28-30 | Ovarian Cancer |
| 000048 | 2/8/96 | 53 | 3 | 2C1.32-34 | Ovarian Cancer with metastasis in peritoneum |
| 000050 | 2/16/96 | 55 | 3 | 2C1.36-38 | Endometrial carcinoma in situ |
| 000051 | 2/16/96 | 37 | 3 | 2C1.40-42 | non-malignant ovary, endometrium |
| 000052 | 2/21/96 | 49 | 3 | 2C1.44-46 | non-malignant endometrium, non-malignant ovary |
| 000053 | 2/27/96 | 72 | 3 | 2C1.48-50 | *Prolapsed uterus |
| 000054 | 2/27/96 | 62 | 5 | 2C1.52-56 | *Pelvic mass |
| 000055 | 2/27/96 | 33 | 3 | 2C1.58-60 | Cervical dysplasia |
| 000056 | 2/21/96 | 31 | 2 | 1C4.10-11 | Fibrocystic |
| 000057 | 3/27/96 | 53 | 3 | 1C4.13-15 | Breast Cancer - (recurrent (ductal carcinoma in situ)) |
| 000059 | 3/5/96 | 56 | 3 | 2C1.66-68 | Endometrial thickening (breast cancer 5/92) |
| 000061 | 3/12/96 | 37 | 3 | 2C1.70-72 | *Menorrhagia |
| 000062 | 3/4/96 | 68 | 3 | 1C4.25-27 | Fibrocystic |
| 000064 | 3/15/96 | 56 | 3 | 1C3.29-31 | Breast Cancer |
| 000065 | 3/20/96 | 33 | 3 | 2C1.74-76 | Ruptured fallopian tube |
| 000066 | 3/25/96 | 25 | 3 | 1C3.15-17 | Fibrocystic |
| 000067 | 3/25/96 | 35 | 3 | 2C1.78-80 | Endometriosis |
| 000069 | 3/26/96 | 53 | 3 | 2C2.1-3 | *Ovarian Cancer with metastasis in peritoneum |
| 000071 | 4/2/96 | | 3 | 2C2.5-7 | Non-malignant Endometrium |
| 000072 | 4/2/96 | 43 | 2 | 2C2.9-10 | Ovarian Cancer |
| 000073 | 9/25/95 | 48 | 3 | 1C3.32-34 | Fibrocystic |
| 000075 | 4/16/96 | 58 | 3 | 2C2.12-14 | Endometrial Cancer |
| 000079 | 4/22/96 | 68 | 3 | 2C2.16-18 | Endometrial Polyps |
| 000080 | 4/15/96 | 34 | 2 | 1C3.46-47 | Breast Cancer |
| 000082 | 4/22/96 | 59 | 2 | 1C3.49-50 | Fibrocystic |
| 000085 | 4/22/96 | 57 | 3 | 1C3.52-54 | Breast Cancer |
| 000087 | 5/6/96 | 41 | 2 | 2C2.20-21 | Endometriosis |
| 000088 | 5/7/96 | 37 | 3 | 2C2.23-25 | Borderline ovarian cystadenoma |
| 000089 | 5/8/96 | 70 | 3 | 2C2.27-29 | *Ovarian Cancer |
| 000090 | 5/14/96 | 36 | 3 | 2C2.34-36 | Cervical Cancer |
| 000091 | 1/19/96 | 64 | 3 | 1C3.69-71 | Breast Cancer |
| 000092 | 5/13/96 | 27 | 3 | 1C3.73-75 | Breast Reduction |
| 000093 | 6/5/96 | 62 | 3 | 1C3.77-79 | Breast Cancer |
| 000094 | 5/28/96 | 37 | 3 | 2C2.38-40 | Endometriosis |
| 000095 | 5/22/96 | 51 | 3 | 1C3.63,80-81 | Microcalcifications |
| 000096 | 5/20/96 | 33 | 3 | 1C4.2-4 | Fibrocystic |
| 000097 | 6/5/96 | 32 | 3 | 2C2.42-44 | Non-malignant Cervix |
| 000098 | 6/5/96 | 30 | 3 | 2C2.46-48 | Non-malignant Other |
| 000100 | 6/18/96 | 45 | 3 | 2C2.50-52 | Malignant endometrium, non-malignant endometrium, ovary, lymph node |
| 000101 | 6/19/96 | 65 | 3 | 2C2.54-56 | Non-malignant Ovary |
| 000102 | 7/1/96 | 69 | 1 | 1C4.6 | Non-malignant breast (with dcis) |

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|--------|------------------|----|---|-----------|--|
| 000103 | 7/2/96 | 40 | 3 | 2C2.58-60 | Malignant Cervix, non-malignant endometrium, ovary, lymph node |
| 000108 | 7/5/96 | 69 | 3 | 2C2.62-64 | * Non-malignant ovary and fallopian tube |
| 000110 | 7/9/96 | 56 | 3 | 2C2.66-68 | Non-malignant endometrium, ovary, lymph node |
| 000111 | 4/3/96 7/3/96 | 55 | 2 | 1C4.17-18 | Malignant Breast |
| 000112 | 7/11/96 | 49 | 3 | 2C2.70-72 | Non-malignant ovary * Non-malignant ovary, lymph node |
| 000113 | 7/12/96 | 41 | 3 | 2C2.74-76 | Non-malignant ovary |
| 000114 | 7/15/96 | 30 | 3 | 2C2.78-80 | Non-malignant endometrium |
| 000118 | 7/24/96 | 52 | 3 | 2C3.1-3 | * Non-malignant ovary |
| 000119 | 7/30/96 | 63 | 3 | 2C3.5-7 | Malignant endometrium, non-malignant ovary, lymph node |
| 000120 | 8/2/96 | 54 | 3 | 2C3.9-11 | Non-malignant ovary |
| 000121 | 8/8/96 | 74 | 3 | 2C3.13-15 | Non-malignant endometrium, ovary, cervix |
| 000122 | 8/13/96 | 50 | 3 | 2C3.16-18 | Non-malignant endometrium, ovary |
| 000123 | 8/13/96 | 43 | 3 | 2C3.19-21 | Non-malignant endometrium |
| 000127 | 9/4/96 | 62 | 2 | 1C4.7-8 | Malignant Breast |
| 000129 | 8/26/96 | 25 | 3 | 1C4.21-23 | Non-malignant Breast |
| 000130 | 9/4/96 | 40 | 2 | 2C3.23-24 | Non-malignant endometrium, ovary |
| 000131 | 9/4/96 | 53 | 3 | 2C3.27-29 | Non-malignant endometrium, ovary |
| 000134 | 9/4/96 | 44 | 3 | 1C4.33-35 | Malignant Breast |
| 000137 | 9/9/96 | 47 | 3 | 1C4.41-43 | Non-malignant Breast |
| 000138 | 9/4/96 | 39 | 3 | 1C4.29-31 | *Non-malignant Breast |
| 000139 | 9/9/96 | 47 | 3 | 1C4.45-47 | Malignant Breast |
| 000140 | 9/13/96 | 45 | 3 | 2C3.31-33 | * Non-malignant endometrium, ovary, fallopian tube |
| 000141 | 9/16/96 | 41 | 3 | 1C4.37-39 | *Malignant Breast |
| 000142 | 9/23/96 | 43 | 5 | 1C4.49-53 | Malignant Breast |
| 000144 | 9/16/96 | 27 | 3 | 1C4.55-57 | Non-malignant Breast |
| 000145 | 9/18/96 | 77 | 3 | 2C3.35-37 | Malignant and non-malignant ovary, lymph node |
| 000147 | 9/18/96 | 73 | 3 | 1C4.59-61 | Non-malignant Breast (with DCIS) |
| 000150 | 9/26/96 | 45 | 3 | 2C3.39-41 | Non-malignant ovary |
| 000152 | 10/2/96 | 36 | 3 | 1C4.63-65 | Malignant Breast |
| 000153 | 10/1/96 | 27 | 3 | 2C3.43-45 | *Cervical Cancer |
| 000158 | 9/30/96 | 33 | 3 | 1C4.67-69 | *Non-malignant Breast (with DCIS) |
| 000165 | 10/9/96 | 82 | 3 | 2C3.47-49 | *Non-malignant ovary |
| 000199 | 10/15/96 | 51 | 3 | 2C3.51-53 | Non-malignant ovary, endometrium |
| 000200 | 10/16/96 | 46 | 3 | 2C3.55-57 | *Non-malignant ovary, endometrium |

Lymphocytes

| Bar Code | Date of Procedure | Age of Patient | # Vials | Sample Location | Sample Class |
|----------|-------------------|----------------|---------|-----------------|------------------------------|
| 100014 | 7/12/95 | 60 | 1 | 1C1.31, 40 | Breast Cancer |
| 100016 | 8/11/95 | 39 | 1 | 1C1.44 | Fibrocystic |
| 100017 | 8/14/95 | 68 | 1 | 1C1.45 | Breast Cancer |
| 100019 | 8/16/95 | 42 | 1 | 1C1.47 | Breast Cancer |
| 100020 | 8/16/95 | 52 | 1 | 1C1.46 | Breast Cancer |
| 000022 | 8/9/95 | 65 | 1 | 1C1.60 | Fibrocystic |
| 100022 | 9/8/95 | 47 | 1 | 1C1.59 | Breast Cancer |
| 000001 | 9/6/95 | 45 | 1 | 1C1.64 | Fibrocystic |
| 000002 | 9/8/95 | 51 | 1 | 1C1.68 | Fibrocystic |
| 000003 | 9/8/95 | 71 | 1 | 1C1.69 | Breast Cancer |
| 000004 | 9/1/95 | 60 | 1 | 1C2.42 | Breast Cancer |
| 000005 | 9/13/95 | 46 | 1 | 1C1.73 | Breast Cancer |
| 000006 | 9/13/95 | 70 | 1 | 1C1.74 | Breast Cancer |
| 000010 | 9/22/95 | 52 | 1 | 1C2.1 | Fibrocystic |
| 000011 | 9/25/95 | 60 | 1 | 1C2.2 | Breast Cancer |
| 000012 | 10/2/95 | 64 | 1 | 1C2.6 | Fibrocystic |
| 000013 | 10/18/95 | 77 | 1 | 1C2.10 | Fibrocystic |
| 000015 | 11/8/95 | 44 | 1 | 1C2.14 | Breast Cancer |
| 000016 | 11/8/95 | 42 | 1 | 1C2.15 | Fibrocystic |
| 000017 | 10/24/95 | 43 | 1 | 1C2.27 | Breast Cancer |
| 000018 | 11/21/95 | 42 | 1 | 1C2.47 | Breast Cancer |
| 000019 | 11/27/95 | 52 | 1 | 1C2.28 | Breast Cancer |
| 000020 | 11/17/95 | 44 | 1 | 1C2.29 | Fibrocystic |
| 000021 | 11/17/95 | 53 | 1 | 1C2.30 | Fibrocystic |
| 000023 | 11/21/95 | 31 | 1 | 1C2.38 | Breast Cancer |
| 000025 | 12/6/95 | 49 | 1 | 1C2.48 | *Breast Cancer |
| 000026 | 12/6/95 | 59 | 1 | 1C2.52 | *Breast Cancer |
| 000027 | 12/8/95 | 33 | 1 | 1C2.56 | Fibrocystic |
| 000028 | 11/22/95 | 76 | 1 | 1C2.81 | Breast Cancer |
| 000029 | 12/18/95 | 59 | 1 | 1C2.64 | Breast Cancer |
| 000030 | 12/20/95 | 22 | 1 | 1C2.60 | Fibrocystic |
| 000031 | 12/20/95 | 58 | 1 | 1C2.65 | Breast Cancer |
| 000032 | 12/29/95 | 55 | 1 | 1C3.10 | Breast Cancer |
| 000033 | 9/22/95 | 36 | 1 | 1C3.1 | Breast Cancer |
| 000034 | 1/10/96 | 72 | 1 | 1C3.2 | Breast Cancer |
| 000035 | 12/27/95 | 46 | 1 | 1C3.6 | Breast Cancer |
| 000037 | 1/22/96 | 65 | 1 | 2C1.1 | Endometrial Cancer |
| 000038 | 1/24/96 | 42 | 1 | 2C1.4 | Ovarian Cancer |
| 000039 | 1/26/96 | 44 | 1 | 1C3.21 | *Breast Cancer |
| 000040 | 1/29/96 | 47 | 1 | 1C3.25 | Breast Cancer |
| 000041 | 11/29/95 | 42 | 1 | 1C3.64 | Fibrocystic |
| 000042 | 1/30/96 | 42 | 1 | 2C1.8 | Endometritis, adenomyosis |
| 000043 | 1/30/96 | 34 | 1 | 2C1.12 | Cervical Cancer |
| 000044 | 1/31/96 | 46 | 1 | 2C1.16 | Post-menopausal bleeding |
| 000045 | 2/6/96 | 28 | 1 | 2C1.20 | (squamous cell cancer of cx) |
| 000046 | 2/7/96 | 54 | 2 | 2C1.23,61 | non-malignant endometrium |
| 000047 | 2/8/96 | 11 | 1 | 2C1.27 | malignant ovary |

| | | | | | |
|--------|------------------|----|---|--------|---|
| 000048 | 2/8/96 | 53 | 1 | 2C1.31 | (ovarian cancer) |
| 000050 | 2/16/96 | 55 | 1 | 2C1.35 | in situ carcinoma endometrium |
| 000051 | 2/16/96 | 37 | 1 | 2C1.39 | (ovarian mass) |
| 000052 | 2/21/96 | 49 | 1 | 2C1.43 | non-malignant endometrium, non-malignant ovary |
| 000053 | 2/27/96 | 72 | 1 | 2C1.47 | *Prolapsed uterus |
| 000054 | 2/27/96 | 62 | 1 | 2C1.51 | *Pelvic mass |
| 000055 | 2/27/96 | 33 | 1 | 2C1.57 | Cervical dysplasia |
| 000056 | 2/21/96 | 31 | 1 | 1C4.9 | Fibrocystic |
| 000057 | 3/27/96 | 53 | 1 | 1C4.12 | Breast Cancer - (recurrent ductal carcinoma in situ) |
| 000059 | 3/5/96 | 56 | 1 | 2C1.65 | Endometrial thickening (breast cancer 5/92) |
| 000061 | 3/12/96 | 37 | 1 | 2C1.69 | *Menorrhagia |
| 000062 | 3/4/96 | 68 | 1 | 1C4.24 | Fibrocystic |
| 000064 | 3/15/96 | 56 | 1 | 1C3.18 | Breast Cancer |
| 000065 | 3/20/96 | 33 | 1 | 2C1.73 | Ruptured fallopian tube |
| 000066 | 3/25/96 | 25 | 1 | 1C3.14 | Fibrocystic |
| 000067 | 3/25/96 | 35 | 1 | 2C1.77 | Endometriosis |
| 000069 | 3/26/96 | 53 | 1 | 2C1.81 | *Ovarian Cancer with metastasis in peritoneum |
| 000071 | 4/2/96 | | 1 | 2C2.4 | Non-malignant Endometrium |
| 000072 | 4/2/96 | 43 | 1 | 2C2.8 | Ovarian Cancer |
| 000073 | 9/25/95 | 48 | 1 | 1C3.19 | Fibrocystic |
| 000075 | 4/16/96 | 58 | 1 | 2C2.11 | Endometrial Cancer |
| 000079 | 4/22/96 | 68 | 1 | 2C2.15 | Endometrial Polyps |
| 000080 | 4/15/96 | 34 | 1 | 1C3.45 | Breast Cancer |
| 000082 | 4/22/96 | 59 | 1 | 1C3.48 | Fibrocystic |
| 000085 | 4/22/96 | 57 | 1 | 1C3.51 | Breast Cancer |
| 000087 | 5/6/96 | 41 | 1 | 2C2.19 | Endometriosis |
| 000088 | 5/7/96 | 37 | 1 | 2C2.22 | Borderline ovarian cystadenoma |
| 000089 | 5/8/96 | 70 | 1 | 2C2.26 | *Ovarian Cancer |
| 000090 | 5/14/96 | 36 | 1 | 2C2.33 | Cervical Cancer |
| 000091 | 1/19/96 | 64 | 1 | 1C3.68 | Breast Cancer |
| 000092 | 5/13/96 | 27 | 1 | 1C3.72 | Breast Reduction |
| 000093 | 6/5/96 | 62 | 1 | 1C3.76 | Breast Cancer |
| 000094 | 5/28/96 | 37 | 1 | 2C2.37 | Endometriosis |
| 000095 | 5/22/96 | 51 | 1 | 1C3.62 | Microcalcifications |
| 000096 | 5/20/96 | 33 | 1 | 1C4.1 | Fibrocystic |
| 000097 | 6/5/96 | 32 | 1 | 2C2.41 | Non-malignant Cervix |
| 000098 | 6/5/96 | 30 | 1 | 2C2.45 | Non-malignant Other |
| 000100 | 6/18/96 | 45 | 1 | 2C2.49 | Malignant endometrium, non-malignant endometrium, ovary, lymph node |
| 000101 | 6/19/96 | 65 | 1 | 2C2.53 | Non-malignant Ovary |
| 000102 | 7/1/96 | 69 | 1 | 1C4.5 | Non-malignant Breast (with DCIS) |
| 000103 | 7/2/96 | 40 | 1 | 2C2.57 | Malignant Cervix, non-malignant endometrium, ovary, lymph node |
| 000108 | 7/5/96 | 69 | 1 | 2C2.61 | * Non-malignant ovary and fallopian tube |
| 000110 | 7/9/96 | 56 | 1 | 2C2.65 | Non-malignant endometrium, ovary, lymph node |
| 000111 | 4/3/96 7/3/96 | 55 | 1 | 1C4.16 | Malignant Breast |
| 000112 | 7/11/96 | 49 | 1 | 2C2.69 | * Non-malignant ovary, lymph node |
| 000113 | 7/12/96 | 41 | 1 | 2C2.73 | Non-malignant ovary |
| 000114 | 7/15/96 | 30 | 1 | 2C2.77 | Non-malignant endometrium |
| 000118 | 7/24/96 | 52 | 1 | 2C2.81 | * Non-malignant ovary |
| 000119 | 7/30/96 | 63 | 1 | 2C3.4 | Malignant endometrium, non-malignant ovary, lymph node |

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|--------|----------|----|---|--------|--|
| 000120 | 8/2/96 | 54 | 1 | 2C3.8 | Non-malignant ovary |
| 000121 | 8/8/96 | 74 | 1 | 2C3.12 | Non-malignant endometrium, ovary, cervix |
| 000127 | 9/4/96 | 62 | 1 | 1C4.19 | Malignant Breast |
| 000129 | 8/26/96 | 25 | 1 | 1C4.20 | Non-malignant Breast |
| 000130 | 9/4/96 | 40 | 1 | 2C3.22 | Non-malignant endometrium, ovary |
| 000131 | 9/4/96 | 53 | 1 | 2C3.26 | Non-malignant endometrium, ovary |
| 000134 | 9/4/96 | 44 | 1 | 1C4.32 | Malignant Breast |
| 000137 | 9/9/96 | 47 | 1 | 1C4.40 | Non-malignant Breast |
| 000138 | 9/4/96 | 39 | 1 | 1C4.28 | *Non-malignant Breast |
| 000139 | 9/9/96 | 47 | 1 | 1C4.44 | Malignant Breast |
| 000140 | 9/13/96 | 45 | 1 | 2C3.30 | * Non-malignant endometrium, ovary, fallopian tube |
| 000141 | 9/16/96 | 41 | 1 | 1C4.36 | *Malignant Breast |
| 000142 | 9/23/96 | 43 | 1 | 1C4.48 | Malignant Breast |
| 000144 | 9/16/96 | 27 | 1 | 1C4.54 | Non-malignant Breast |
| 000145 | 9/18/96 | 77 | 1 | 2C3.34 | Malignant and non-malignant ovary, lymph node |
| 000147 | 9/18/96 | 73 | 1 | 1C4.58 | Non-malignant Breast (with DCIS) |
| 000150 | 9/26/96 | 45 | 1 | 2C3.38 | Non-malignant ovary |
| 000152 | 10/2/96 | 36 | 1 | 1C4.62 | Malignant Breast |
| 000153 | 10/1/96 | 27 | 1 | 2C3.42 | *Cervical Cancer |
| 000158 | 9/30/96 | 33 | 1 | 1C4.66 | *Non-malignant Breast (with DCIS) |
| 000165 | 10/9/96 | 82 | 1 | 2C3.46 | *Non-malignant ovary |
| 000199 | 10/15/96 | 51 | 1 | 2C3.50 | Non-malignant ovary,endometrium |
| 000200 | 10/16/96 | 46 | 1 | 2C3.54 | *Non-malignant ovary,endometrium |

* Indicates no written consent currently available